

EC4AW-H6

S E R I E S

**5-6WATT, 4 : 1 Input
Range, I/O Isolation
6000VDC**



Features

- 5-6W Isolated Output
- DIP-24 Package
- Regulated Outputs
- Efficiency to 85%
- Continuous Short Circuit Protection
- I/O Isolation Voltage 6000VDC
- Reinforced Insulation Rated For Working Voltage 300VAC
- 5 μ A Leakage Current
- EMI Meets EN55022 Class A
- Safety Meets UL60950-1 and UL60601-1
- CE Mark Meets 2004/108/EC

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	INPUT CURRENT		INPUT CURRENT		% EFF.		CAPACITOR LOAD MAX.
			MIN.(4)	MAX.	NO LOAD	FULL LOAD	(2)	(3)	
EC4AW-24S05H6	9-36 VDC	5 VDC	100 mA	1000 mA	10 mA	260 mA	81	80	1000 μ F
EC4AW-24S12H6	9-36 VDC	12 VDC	50 mA	500 mA	10 mA	295 mA	85.5	85	500 μ F
EC4AW-24D12H6	9-36 VDC	\pm 12 VDC	25 mA	\pm 250 mA	15 mA	298 mA	84.5	84	250 μ F
EC4AW-24D15H6	9-36 VDC	\pm 15 VDC	20 mA	\pm 200 mA	15 mA	298 mA	84.5	84	200 μ F
EC4AW-48S05H6	18-72 VDC	5 VDC	100 mA	1000 mA	5 mA	130 mA	81	80	1000 μ F
EC4AW-48S12H6	18-72 VDC	12 VDC	50 mA	500 mA	5 mA	149 mA	85	84	500 μ F
EC4AW-48D12H6	18-72 VDC	\pm 12 VDC	25 mA	\pm 250 mA	8 mA	150 mA	84	83	250 μ F
EC4AW-48D15H6	18-72 VDC	\pm 15 VDC	20 mA	\pm 200 mA	8 mA	149 mA	85	84	200 μ F

NOTE: 1. Nominal input voltage 24 or 48VDC

2. Measured at 12VDC for 24Vin models, 24VDC for 48Vin models

3. Measured at nominal input voltage

4. Operation under minimum load will not damage the converter, but it may not meet all specifications

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	24Vin	9-36V
	48Vin	18-72V
Under Voltage Protection	24Vin power up	8.8V typ.
	24Vin power down8V typ.
	48Vin power up	17V typ.
	48Vin power down	1.6V typ.
Leakage Current		5uA max.
Input Filter		Pi Type
Input Surge (100ms max.)	24Vin	50V max.
	48Vin	100V max.

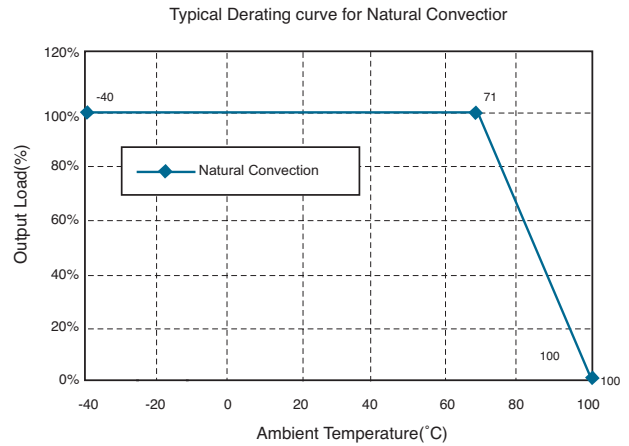
OUTPUT SPECIFICATIONS:

Voltage Accuracy	±1.5% max.	
Voltage Balance (Dual)	±2.0% max.	
Transient Response: 75% - 100% Step Load Change		
Error Band	±6% Vout nominal	
Recovery Time	< 500µs	
Ripple & Noise, 20MHz BW (with 0.1uF MLCC)	5V ... 100mV pk-pk max.	
	12V/15V ... 1% pk-pk max.	
Temperature Coefficient	±0.05%/°C	
Line Regulation ¹	±0.5% max.	
Load Regulation	±0.5% max.	
	Dual ³	±1.0% max.
Cross Regulation(Dual output) Load cross variation 25%/100%...	±5% max.	
Output Short Circuit Protection	Continuous	
Start up time	1.5ms typ.	

GENERAL SPECIFICATIONS:

Isolation Voltage	6000VDC min.	
Isolation Resistance	10 ⁹ ohm min.	
Isolation Capacitance	40pF typ.	
Reinforced Insulation	Creepage Distances	8mm min.
	Air Clearances	8mm min.
Switching Frequency	100KHz, min.	
Operating Ambient Temperature	-40°C to +71°C	
De-rating, Above 71°C	Linearly to Zero power at 100°C	
Case Temperature ⁴	100°C max.	
Storage Temperature	-40°C to +100°C	
EMI	Conductive EMI Meet EN55022 Class A	
Humidity	95% RH max. Non condensing	
MTBF	MIL-STD-217-F, GB, 25°C, Full Load	T.B.D hrs
Dimensions	1.25x0.8x0.4 inches (31.8x20.3x10.2 mm)	
Case Material	Non-Conductive Black Plastic	
Weight	T.B.D g	

EC4AW Series Derating Curve



NOTE:

1. Measured from high line to low line.
2. Measured from full load to 10% load.
3. Measured from full load to 25% load.
4. Maximum case temperature under any operating condition should not be exceeded 100°C.

PIN CONNECTION

Pin	Single	Dual
1	+V Input	+V Input
2	+V Input	+V Input
11	NP	Common
12	-V Output	NP
13	+V Output	-V Output
15	NP	+V Output
23	-V Input	-V Input
24	-V Input	-V Input

* NC-NO CONNECTION WITH PIN

* NP-NO PIN

CASE A

NOTE: Pin Size is 0.02" Inch (0.5mm) DIA ±0.05
 All Dimensions In Inches(mm)
 Tolerance Inches: x.xx= ±0.02, x.xxx= ±0.010
 Millimeters: x.x= ±0.5, x.xx= ±0.25

